

PROJECT 10073 RECORD CARD

1. DATE 11 April 1963	2. LOCATION 02.N 168.37W (Pacific)		12. CONCLUSIONS <input type="checkbox"/> Was Balloon <input type="checkbox"/> Probably Balloon <input type="checkbox"/> Possibly Balloon <input type="checkbox"/> Was Aircraft <input type="checkbox"/> Probably Aircraft <input type="checkbox"/> Possibly Aircraft <input type="checkbox"/> Was Astronomical <input type="checkbox"/> Probably Astronomical <input type="checkbox"/> Possibly Astronomical
3. DATE-TIME GROUP Local _____ GMT 11/1620Z	4. TYPE OF OBSERVATION <input type="checkbox"/> Ground-Visual <input type="checkbox"/> Ground-Radar <input checked="" type="checkbox"/> Air-Visual <input type="checkbox"/> Air-Intercept Radar		<input type="checkbox"/> Other _____
5. PHOTOS <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6. SOURCE Civilian Airline Quantas		<input type="checkbox"/> Insufficient Data for Evaluation <input type="checkbox"/> Unknown
7. LENGTH OF OBSERVATION not reported	8. NUMBER OF OBJECTS one	9. COURSE not reported	
10. BRIEF SUMMARY OF SIGHTING CIRVIS report of object that appeared to be a satellite observed at 20 dgr elevation bearing 260 dgr magnetic from reporting a/c.		11. COMMENTS Only that object resembling satellite was reported. ECHO data not available, object assumed to be satellite. ECHO (CIRVIS) ELEVATION AT 1602 AT 60° 37'. NOT VISIBLE	

DEPARTMENT OF THE AIR FORCE

STAFF MESSAGE BRANCH

UNCLASSIFIED MESSAGE

Pg 1 of 2

AF IN: 29563 (11 Apr 63) G/eld

INFO : NIN-9, XOP-1, XOPX-4, ~~SAF~~ ~~OS-3~~, ~~ARMY~~ ~~12~~, ~~G~~ ~~OSD-15~~, JCS-35, DIA-20,
DIA-CIIC-2, NSA-7, CIA-11, CMC-8 (118)

SMB B 189

CN 62

OO RUEAHQ

DE RUHLKH 12

O 111735Z

FM 326 AIR DIV KUNIA FACILITY HAWAII

TO RUHLKM/PACAF HICKAM AFB HAWAII

RUHPHH/COMHAWSEAFRON PERAL HARBOR HAWAII

INFO RUEAHQ/CSAF USAF WAS DC

RUECW/CNO WASH DC

RUECW/SECNAV WASH DC

RUWGALB/CINCNOAD ENT AFB COLO

RUHPA/CINCPAC CAMP H M SMITH HAWAII

RUHAFS/CINCUSARPAC FT SHAFTER HAWAII

RUHPB/CINCPACFLT PERAL HARBOR HAWAII

RUUAUZ/CONUSJAPAN FUCHU AS JAPAN

RUMAC/COMUSKOREA SEOUL KOREA

RUAGFL/COMUSTDC TAIPEI TAIWAN

RUCSBR/CINCSAC OFFUTT AFB NEBR

RUHPD/COMASWFORPAC FORD ISLAND HAWAII

BT

UNCLAS HADOC-D 0683

DEPARTMENT OF THE AIR FORCE
STAFF MESSAGE BRANCH
UNCLASSIFIED MESSAGE

I N C O M I N G

AF IN: 29563 (11 Apr 63)

pg 2 of 2

1. CIRVIS REPORT
2. QUANTAS 531, B-707
3. APPEARED TO BE A SATELLITE
4. 20 DEG ABOVE HORIZON. POSITION OF AIRCRAFT, 02N 168.37 W
5. 11/1620Z
6. UNKNOWN
7. BEARING 260 DEG MAGNETIC FROM REPORTING AIRCRAFT
8. UNKNOWN

BT

11/1745Z APR RUHLKH

NOTE: ADV CY TO DIA, XOPX AND NIN.

SATELLITE 1960 1014 1 FOR OTHER LATITUDES									
EQUATOR S-N		SOUTH-NORTH		NORTH-SOUTH		EQUATOR S-N		SOUTH-NORTH	
TIME (UT)	LONG. (M)	LAT.	TIME CORR.	LONG. CORR. (M)	HT. IN-ET	TIME CORR.	LONG. CORR. (M)	HT. IN-ET	TIME CORR.
APRIL 7, 1963									
0 47.2	173.11	47.4	28.9	-82.67	945 90.0*	28.9	-82.71	945 90.0*	28.9
2 42.6	202.10	45.0	23.6	-60.68	939 122.3*	23.6	-104.69	948 107.7*	23.6
4 38.0	231.50	40.0	19.4	-45.47	933 160.7*	19.4	-119.91	948 119.3*	19.4
6 33.4	260.89	35.0	16.3	-35.87	928 198.0*	16.3	-129.52	948 129.5*	16.3
8 28.8	289.88	30.0	13.7	-28.56	923 235.4*	13.7	-136.83	948 136.8*	13.7
10 24.2	318.88	20.0	8.9	-17.29	915 272.8*	8.9	-148.05	943 136.3	8.9
12 19.7	348.27	0.	0.	0.	903 310.2*	0.	-165.32	938 140.1	0.
14 15.1	377.47	-20.0	-8.8	17.29	896 347.6*	-8.8	-182.18	928 136.3	-8.8
16 10.5	406.67	-30.0	-13.6	28.57	898 385.0*	-13.6	-199.92	923 130.6	-13.6
18 5.9	435.87	-40.0	-18.3	35.90	899 422.4*	-18.3	-217.66	918 126.0	-18.3
20 1.3	465.05	-40.0	-18.3	45.50	901 460.8*	-18.3	-235.40	918 126.0	-18.3
22 56.7	494.25	-45.0	-23.4	60.73	903 500.0*	-23.4	-253.14	912 107.7*	-23.4
24 52.7	523.45	-47.4	-28.6	82.74	908 540.0*	-28.6	-270.88	908 90.0*	-28.6
APRIL 8, 1963									
1 47.2	102.63	47.4	28.9	-82.67	945 90.0*	28.9	-82.71	945 90.0*	28.9
3 42.6	231.83	45.0	23.6	-60.68	939 122.3*	23.6	-104.69	948 107.7*	23.6
5 38.0	261.02	40.0	19.4	-45.47	933 160.7*	19.4	-119.91	948 119.3*	19.4
7 33.4	290.21	35.0	16.3	-35.87	928 198.0*	16.3	-129.52	948 129.5*	16.3
9 28.8	319.41	30.0	13.7	-28.56	923 235.4*	13.7	-136.83	948 136.8*	13.7
11 24.2	348.61	20.0	8.9	-17.29	915 272.8*	8.9	-148.05	943 136.3	8.9
13 19.7	377.81	0.	0.	0.	903 310.2*	0.	-165.32	938 140.1	0.
15 15.1	407.01	-20.0	-8.8	17.29	896 347.6*	-8.8	-182.18	928 136.3	-8.8
17 10.5	436.21	-30.0	-13.6	28.57	898 385.0*	-13.6	-199.92	923 130.6	-13.6
19 5.9	465.41	-40.0	-18.3	35.90	899 422.4*	-18.3	-217.66	918 126.0	-18.3
21 1.3	494.61	-40.0	-18.3	45.50	901 460.8*	-18.3	-235.40	918 126.0	-18.3
23 56.7	523.81	-45.0	-23.4	60.73	903 500.0*	-23.4	-253.14	912 107.7*	-23.4
25 52.7	553.01	-47.4	-28.6	82.74	908 540.0*	-28.6	-270.88	908 90.0*	-28.6
APRIL 9, 1963									
0 47.2	102.63	47.4	28.9	-82.67	945 90.0*	28.9	-82.71	945 90.0*	28.9
2 42.6	231.83	45.0	23.6	-60.68	939 122.3*	23.6	-104.69	948 107.7*	23.6
4 38.0	261.02	40.0	19.4	-45.47	933 160.7*	19.4	-119.91	948 119.3*	19.4
6 33.4	290.21	35.0	16.3	-35.87	928 198.0*	16.3	-129.52	948 129.5*	16.3
8 28.8	319.41	30.0	13.7	-28.56	923 235.4*	13.7	-136.83	948 136.8*	13.7
10 24.2	348.61	20.0	8.9	-17.29	915 272.8*	8.9	-148.05	943 136.3	8.9
12 19.7	377.81	0.	0.	0.	903 310.2*	0.	-165.32	938 140.1	0.
14 15.1	407.01	-20.0	-8.8	17.29	896 347.6*	-8.8	-182.18	928 136.3	-8.8
16 10.5	436.21	-30.0	-13.6	28.57	898 385.0*	-13.6	-199.92	923 130.6	-13.6
18 5.9	465.41	-40.0	-18.3	35.90	899 422.4*	-18.3	-217.66	918 126.0	-18.3
20 1.3	494.61	-40.0	-18.3	45.50	901 460.8*	-18.3	-235.40	918 126.0	-18.3
22 56.7	523.81	-45.0	-23.4	60.73	903 500.0*	-23.4	-253.14	912 107.7*	-23.4
24 52.7	553.01	-47.4	-28.6	82.74	908 540.0*	-28.6	-270.88	908 90.0*	-28.6
APRIL 10, 1963									
1 47.2	102.63	47.4	28.9	-82.67	945 90.0*	28.9	-82.71	945 90.0*	28.9
3 42.6	231.83	45.0	23.6	-60.68	939 122.3*	23.6	-104.69	948 107.7*	23.6
5 38.0	261.02	40.0	19.4	-45.47	933 160.7*	19.4	-119.91	948 119.3*	19.4
7 33.4	290.21	35.0	16.3	-35.87	928 198.0*	16.3	-129.52	948 129.5*	16.3
9 28.8	319.41	30.0	13.7	-28.56	923 235.4*	13.7	-136.83	948 136.8*	13.7
11 24.2	348.61	20.0	8.9	-17.29	915 272.8*	8.9	-148.05	943 136.3	8.9
13 19.7	377.81	0.	0.	0.	903 310.2*	0.	-165.32	938 140.1	0.
15 15.1	407.01	-20.0	-8.8	17.29	896 347.6*	-8.8	-182.18	928 136.3	-8.8
17 10.5	436.21	-30.0	-13.6	28.57	898 385.0*	-13.6	-199.92	923 130.6	-13.6
19 5.9	465.41	-40.0	-18.3	35.90	899 422.4*	-18.3	-217.66	918 126.0	-18.3
21 1.3	494.61	-40.0	-18.3	45.50	901 460.8*	-18.3	-235.40	918 126.0	-18.3
23 56.7	523.81	-45.0	-23.4	60.73	903 500.0*	-23.4	-253.14	912 107.7*	-23.4
25 52.7	553.01	-47.4	-28.6	82.74	908 540.0*	-28.6	-270.88	908 90.0*	-28.6

SATELLITE 1960 1014 1 FOR OTHER LATITUDES									
EQUATOR S-N		SOUTH-NORTH		NORTH-SOUTH		EQUATOR S-N		SOUTH-NORTH	
TIME (UT)	LONG. (M)	LAT.	TIME CORR.	LONG. CORR. (M)	HT. IN-ET	TIME CORR.	LONG. CORR. (M)	HT. IN-ET	TIME CORR.
APRIL 11, 1963									
0 54.0	192.82	47.4	28.8	-82.69	939 90.0*	28.8	-82.73	939 90.0*	28.8
2 51.4	222.01	45.0	23.6	-60.69	932 122.3*	23.6	-104.72	943 107.7*	23.6
4 48.8	251.20	40.0	19.4	-45.48	925 160.7*	19.4	-119.92	943 119.3*	19.4
6 46.2	280.40	35.0	16.3	-35.88	920 198.0*	16.3	-129.52	943 129.5*	16.3
8 43.6	309.59	30.0	13.6	-28.56	915 235.4*	13.6	-136.82	943 136.8*	13.6
10 41.0	338.79	20.0	8.8	-17.29	908 272.8*	8.8	-148.08	943 140.1	8.8
12 38.4	367.98	0.	0.	0.	898 310.2*	0.	-165.34	943 140.1	0.
14 35.8	397.17	-20.0	-8.8	17.29	896 347.6*	-8.8	-182.17	938 136.3	-8.8
16 33.2	426.37	-30.0	-13.6	28.57	899 385.0*	-13.6	-199.91	929 130.6	-13.6
18 30.6	455.56	-40.0	-18.2	35.90	901 422.4*	-18.2	-217.69	929 126.0	-18.2
20 28.0	484.76	-40.0	-18.2	45.51	903 460.8*	-18.2	-235.70	929 126.0	-18.2
22 25.4	513.95	-45.0	-23.4	60.73	908 500.0*	-23.4	-253.71	929 107.7*	-23.4
24 22.8	543.15	-47.4	-28.6	82.74	914 540.0*	-28.6	-270.78	914 90.0*	-28.6
APRIL 12, 1963									
0 3.0	163.14	47.4	28.8	-82.69	937 90.0*	28.8	-82.74	937 90.0*	28.8
2 58.4	212.33	45.0	23.6	-60.70	930 122.3*	23.6	-104.73	942 107.7*	23.6
4 53.8	241.53	40.0	19.4	-45.49	923 160.7*	19.4	-119.93	943 119.3*	19.4
6 49.2	270.72	35.0	16.3	-35.88	918 198.0*	16.3	-129.52	943 129.5*	16.3
8 44.6	299.92	30.0	13.6	-28.56	913 235.4*	13.6	-136.83	943 136.8*	13.6
10 42.0	329.11	20.0	8.8	-17.29	905 272.8*	8.8	-148.09	943 140.1	8.8
12 39.4	358.31	0.	0.	0.	897 310.2*	0.	-165.35	943 140.1	0.
14 36.8	387.51	-20.0	-8.8	17.29	896 347.6*	-8.8	-182.16	938 136.3	-8.8
16 34.2	416.71	-30.0	-13.6	28.57	899 385.0*	-13.6	-199.90	931 130.6	-13.6
18 31.6	445.91	-40.0	-18.2	35.90	901 422.4*	-18.2	-217.69	929 126.0	-18.2
20 29.0	475.11	-40.0	-18.2	45.51	904 460.8*	-18.2	-235.70	929 126.0	-18.2
22 26.4	504.31	-45.0	-23.4	60.73	909 500.0*	-23.4	-253.71	929 107.7*	-23.4
24 23.8	533.51	-47.4	-28.6	82.74	915 540.0*	-28.6	-270.78	915 90.0*	-28.6
APRIL 13, 1963									
1 3.4	202.66	47.4	28.8	-82.70	935 90.0*	28.8	-82.74	935 90.0*	28.8
3 58.8	251.85	45.0	23.6	-60.70	928 122.3*	23.6	-104.73	940 107.7*	23.6
5 54.2	281.05	40.0	19.4	-45.49	921 160.7*	19.4	-119.93	943 119.3*	19.4
7 49.6	310.24	35.0	16.3	-35.89	916 198.0*	16.3	-129.53	943 129.5*	16.3
9 45.0	339.43	30.0	13.6	-28.57	912 235.4*	13.6	-136.84	943 136.8*	13.6
11 42.4	368.63	20.0	8.8	-17.29	905 272.8*	8.8	-148.09	943 140.1	8.8
13 39.8	397.82	0.	0.	0.	896 310.2*	0.	-165.35	943 140.1	0.
15 37.2	427.02	-20.0	-8.8	17.29	896 347.6*	-8.8	-182.16	936 136.3	-8.8
17 34.6	456.22	-30.0	-13.6	28.57	899 385.0*	-13.6	-199.90	931 130.6	-13.6
19 32.0	485.42	-40.0	-18.2	35.90	902 422.4*	-18.2	-217.69	929 126.0	-18.2
21 29.4	514.62	-40.0	-18.2	45.51	905 460.8*	-18.2	-235.70	929 126.0	-18.2
23 26.8	543.82	-45.0	-23.4	60.73	911 500.0*	-23.4	-253.71	929 107.7*	-23.4
25 24.2	573.02	-47.4	-28.6	82.74	917 540.0*	-28.6	-270.77	917 90.0*	-28.6

MODIFIED ORBITAL ELEMENTS FOR EARTH SATELLITE 1960 1014 1

REFERENCE TIME (1963) Y 3 M 10 D 10 52.42 H UT
 INCLINATION 47.25 DEG.
 PERIGEE NODE (LONG.) 155.70 DEG. WEST
 PERIODE INTERVAL ONE DAY -16.77 MIN.
 ARGUMENT OF PERIGEE 271.97 DEG.
 RATE OF CHANGE 0.38355 DEG. PER PERIOD
 ANOMALISTIC PERIOD 115.545 MIN.
 RATE OF CHANGE -0.00005 MIN. PER PERIOD
 EARTH SATELLITE 1960 1014 1
 PERIOD OF PERIGEE -850.2 MILES
 PERIOD OF ANOMALISTIC 850.2 MILES
 RATE OF CHANGE -0.04 MILES PER DAY
 ASTERIODING RATE 18.21 50.00 DEG.
 RATE OF CHANGE -3.25080 DEG. PER DAY
 LATITUDE OF PERIGEE 47.21 DEG.